



Falmouth Alternate Landfall Analysis
Town of Falmouth

October 17, 2022

Business Proprietary and Confidential

Mayflower Wind Falmouth Timeline

2021 November Submitted initial Falmouth EFSB Petition 2022 March Meeting with Town on Alternate Landfalls Postponed initial EFSB Public Comment Hearing (scheduled for March 24) May Kicked off Alternate Landfall Engineering Project Change to HVDC June Presentation at Falmouth Public Forum July Filed a Motion to Suspend with the EFSB on to officially suspend the Falmouth EFSB proceeding August EFSB granted the Motion to Suspend September Concluded Alternate Landfall and HVDC Engineering Meetings with Property Owners/Stakeholders

Alternate Landfalls

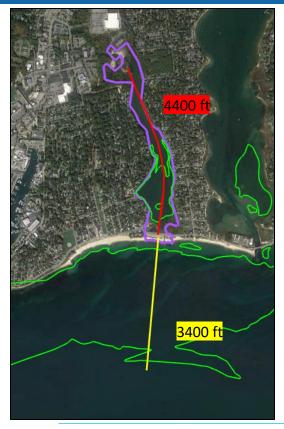


Little Pond Landfall

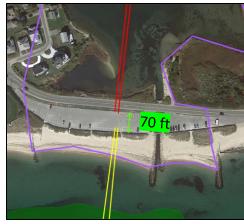


- Scenario 1 Continuous HDD from offshore export cable corridor to Town property north of Little Pond on Spring Bars Road
 - 7500 feet exceeds the range of HDD feasibility
 - HDD curvature increases technical difficulty

Little Pond Landfall



- Scenario 2 HDD from offshore to Bristol Beach Parking Lot, HDD from Parking Lot to Town property north of Little Pond on Spring Bars Road
 - Bristol Beach Parking Lot is too narrow approximately 100 ft from the HDD entry to the back of the drill rig is needed for workspace.
 - HDD operations would require the complete closure of Menauhant Rd. for 3-5 months in order to avoid the existing sensitive dunes.



Little Pond Landfall



- Scenario 3 Separate the HDDs into two, meeting in Little Pond in a cofferdam
 - Cofferdam construction requires direct burial and will create a large sediment plume around the burial operation.
 - Little Pond is a constricted waterway without natural tidal flushing.
 - Disruption of shellfish habitats due to sediment dispersal generated during installation.



Scranton Avenue Parking Lot



- Small HDD area (0.37 acres) does not provide adequate area for installation vehicles and equipment
- HDD and transition vault construction on privatelyowned land
 - No response from property owner
- HDD construction would hinder access to commercial properties to the south and access to the Harbor

Clinton Avenue Parking Lot



- Abutters to the east are in close proximity to the work zone
 - Falmouth Tides Motel and Falmouth Yacht Club operations would be hindered during HDD operations.
- Very shallow cover under the beach due to the required location of the entry pit
 - TJBs may be exposed to sea level
 - Dewatering difficult to accomplish
- Narrow parking lot
 - Traffic Impacts

Surf Drive Parking Lot

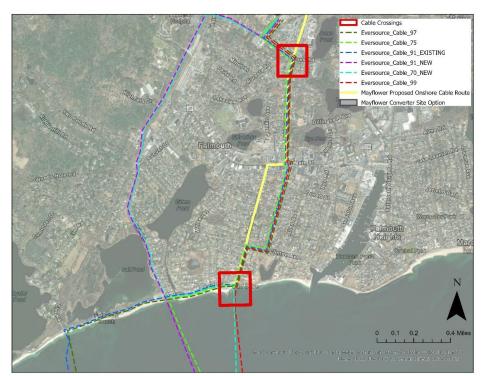


Figure taken from Burns & McDonnell's Surf Drive Ampacity Report. Mutual heating at cable crossings produce adverse de-rating.

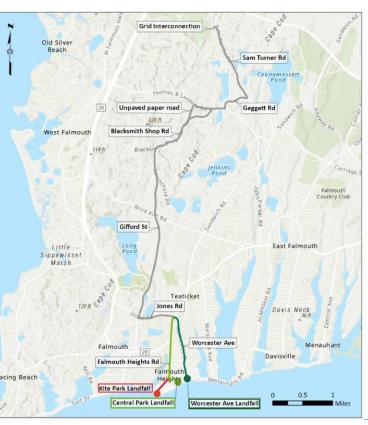
- Mutual heating modeling conducted to assess risks and impact of siting near Eversource's electrical cables serving Martha's Vineyard.
- Modeling results show that mutual heating between Mayflower and Eversource cables exceeds maximum cable operating temperatures.
- Mayflower shared modeling report on 10/21
 - Eversource, Mayflower and the Town of Falmouth met on 10/21 to discuss modeling report.

Kite Park Landfall



- Two (2) HVDC HDDs are technically feasible through Town-owned beach parcel
 - HDD trajectory discussed with multiple consultants/vendors and determined to be technically challenging but feasible.
- Mayflower plans to include HDD trajectory through Town beach parcel as a <u>variant</u> to our Preferred and Noticed Alternative Route.

Mayflower Onshore Route Scoring



- Standard industry scoring criteria, including but not limited to:
 - Direct residential abutters
 - Traffic congestion
 - Sensitive receptors (hospitals, schools, elder care facilities, police/fire, etc.)
 - Wetland areas
 - Flood risk
 - Historic properties
 - Archaeological resources
 - Listed rare species habitat
 - Public water supplies
 - Article 97 land
 - Tree removal

Onshore Construction Impacts

- Onshore cable installation will occur outside of the busy summer season to the maximum extent possible. Any high season or night-time construction would be done in coordination with and with the approval of the Town.
 - Onshore HDD construction in Falmouth is expected to last 2 3 years (offseason work only)
 - Horizontal Directional Drilling is expected to take 3 5 months (offseason work only)
- Lane or road closures will use a rolling setup, so only a section of the roadway is worked on at a given time.
- Mayflower will comply with all applicable construction noise requirements and implement mitigations:
 - Temporary noise barriers at HDD locations
 - Maintaining equipment with functioning mufflers
 - Low-noise generators
- Mayflower will create a construction schedule webpage to alert residents of construction locations, dates, activities and traffic control measures.



Mayflower Next Steps

- Mayflower is planning to re-file MA EFSB petition before the end of 2022
- Petition will include alternate landfall engineering and HVDC engineering
 - Kite Park to be included as a landfall option
 - Smaller HVDC converter station footprint, smaller underground duct bank, fewer cables, etc.
- Abutter notifications would be resent to the Falmouth community in early 2023

Thank You

Questions and Comments?

